

What is claimed is:

1. A control apparatus for controlling a motor with a movable part, comprising:

locking means disposed adjacent to the motor for locking the  
5 movable part of the motor,

detecting means for detecting a position of the movable part  
when the movable part is locked,

storage means for storing a locking position of the movable  
part to be locked, and

10 malfunction detecting means electrically connected to the  
detecting means and the storage means, said malfunction detecting  
means determining that the locking means locks the movable part  
at an abnormal position when a deviation between the position of  
the movable part detected by the detecting means and the locking  
15 position in the storage means is larger than a reference value.

2. A control apparatus according to claim 1, further comprising  
an alarm for sending an alarm signal when the deviation between  
the position of the movable part detected by the detecting means  
20 and the locking position is larger than a predetermined  
proportion of the reference value.

3. A control apparatus according to claim 1, further comprising  
position estimating means electrically connected to the detecting  
25 means and the storage means for estimating an estimated position  
of the movable part of the motor.

4. A control apparatus according to claim 3, wherein said storage  
means stores positions of the movable part when the locking means  
30 locks the movable part at every predetermined time as the locking

position so that the estimating means estimates the estimated position of the movable part based on a time change in the locking position of the movable part stored in the storage means.

- 5 5. A control apparatus according to claim 4, further comprising an alarm for sending an alarm signal when a deviation between the estimated position and the locking position stored in the storage means is larger than a predetermined proportion of the reference value.

- 10 6. A control apparatus according to claim 1, further comprising time estimating means electrically connected to the detecting means and the storage means, said storage means storing positions of the locking means for every predetermined time as the locking  
15 position, said estimating means estimating an estimated time when a deviation between the estimated position and the locking position stored in the storage means is larger than the reference value.

- 20 7. A control apparatus according to claim 6, further comprising an alarm for sending an alarm signal when the estimated time by the time estimating means is greater than a predetermined value.